

Sun Exploration and Production Company

No 24 Smith Road ClayDesta Plaza PO Box 1861 Midland TX 79702 9970 915 688 0300

April 131, 1989. [6]

APR 7 1989

Mr. David Catanach Energy & Mineral Dept. Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

RE: Request for Exception to Rule 303-A
Downhole Commingling
Sun Exploration & Production Company
New Mexico 'R' State No. 2, Unit "H"
2129' FNL & 660' FEL, Sec 33,
T-13-S, R-34-E
Cerca Upper Penn
Cerca Lower Wolfcamp
Lea County, New Mexico

Dear Mr. Catanach:

Sun Exploration and Production Company requests administrative approval for an exception to Rule 303-A to permit the downhole commingling of production in the subject well from the Cerca Upper Penn and Cerca Lower Wolfcamp pools in Lea County, New Mexico.

Sun performed a workover on the subject well from 3-14-89 thru 3-16-89. The work included acidizing the original perfs at 10398-407 in the Cerca Upper Penn and adding two sets of perfs, 10314-21 and 10341-58, in the Cerca Lower Wolfcamp. These perfs were found to be tight and unable to be broken down with acid and therefore are not contributing production in the well.

It was not realized by Sun that the perf additions at 10314-21 and 10341-58 were considered to be in a different pool from the Cerca Upper Penn. However, prior to performing the workover, proper commission approval had been gained.

New Mexico 'R' State No. 2 Page 2 April 13, 1989

Because perfs are open in the Cerca Lower Wolfcamp pool and Cerca Upper Penn pool, downhole commingling permission is requested. However, since the Wolfcamp perfs were tight and non-productive, no additional information for this application is deemed pertinent.

Sincerely,

Bruce Goodwin

Production Engineer

(915) 688-0419

pk

## Attachments:

- 1. Well History
- 2. Completion Log
- 3. Production Curve
- 4. Form C-103
- 5. Form C-116

## NEW MEXICO 'R' STATE NO. 2

## WELL HISTORY

LOCATION:

2129' FNL & 660' FEL. SEC 33, T-13-S, R-34-E, UNIT "H",

CERCA UPPER PENN FIELD, LEA COUNTY, NEW MEXICO

**ELEVATION:** 

KB - 4153

GL - 4140

**DEPTHS:** 

TD - 10500

CS - 10500

PBTD - 10454 (WL)

SPUD DATE:

09-08-69

COMPLETED:

10-14-69

CSG DATA:

SURFACE

13-3/8", 48#, H-40, STC CSG. CS ±455'. CMT'D W/250 SKS INCOR. CIRC 4 SKS TO SURFACE.

INTERMEDIATE - 8-5/8", 24 & 28#, J-55 & H-40, STC & LTC CSG.

CS ±4500'. CMT'D W/300 SKS INCOR. DID NOT CIRC

CMT. TOC ±2282 - CALCULATED.

PRODUCTION -

5-1/2", 15.5 & 17#, J-55 & N-80, BUTT, STC & LTC

CSG. CS  $\pm 10500$ '. CMT'D W/200 SKS INCOR. TOC

±9350 VIA T.S.

## LOGS AVAILABLE:

DRESSER-ATLAS GR/BHC SONIC DATED 10-6-69 FROM 10493-SURF. 1.

2. DRESSER-ATLAS GR/LATEROLOG DATED 10-6-69 FROM 10492-4500.

MCCULLOUGH GR/CCL DATED 10-10-69 FROM 10452-9702.

## WELL HISTORY:

BEGAN COMPLETION. MCCULLOUGH RAN GR/CCL FROM 10452 TO 9702 10-10-69

(WL TD 10454'). PERF PENN "A" LIME SET I 10398, 400, 403,

405, 407, 1 JSPF, TOTAL 5 HOLES W/3-1/8" CG.

DOWELL ACIDIZED 10398-407 W/1000 GALS 15% BDA. BDP - VAC. 10-11-69

FP - 0. ISIP - VAC. AIR 3 BPM. SWAB & FLOW BACK L&AW.

10-14-69 I.P. 24 HRS F 309 BO, 10 BLW, 134 MCF, 48/64" CHOKE, 50# FTP,

GOR 435-1, 43.5° API. FINAL REPORT.

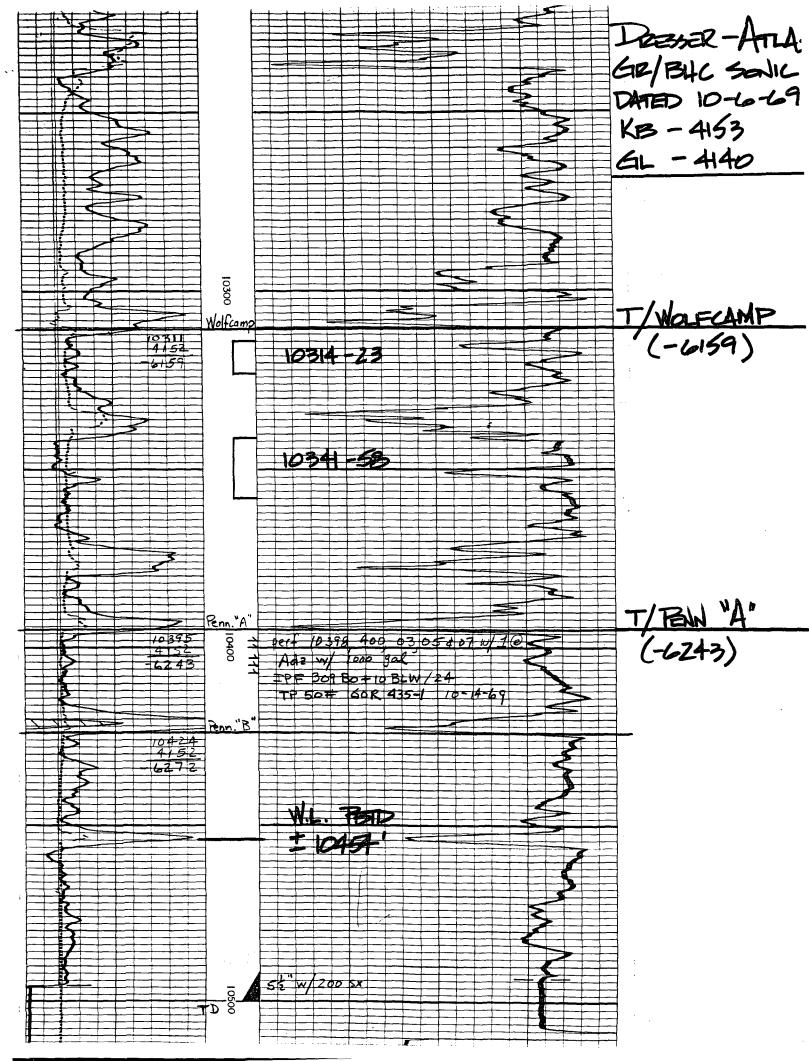
03-04-78 DUMP ACID JOB FOR POSSIBLE SCALE BUILD-UP. A.A. OILFIELD

> SERVICE PUMP 500 GALS 15% NEFEHCL DN ANNULUS. FLUSHED ACID W/30 BBLS LEASE OIL. LEFT WELL SHUT-IN 4 HRS. RESUMED

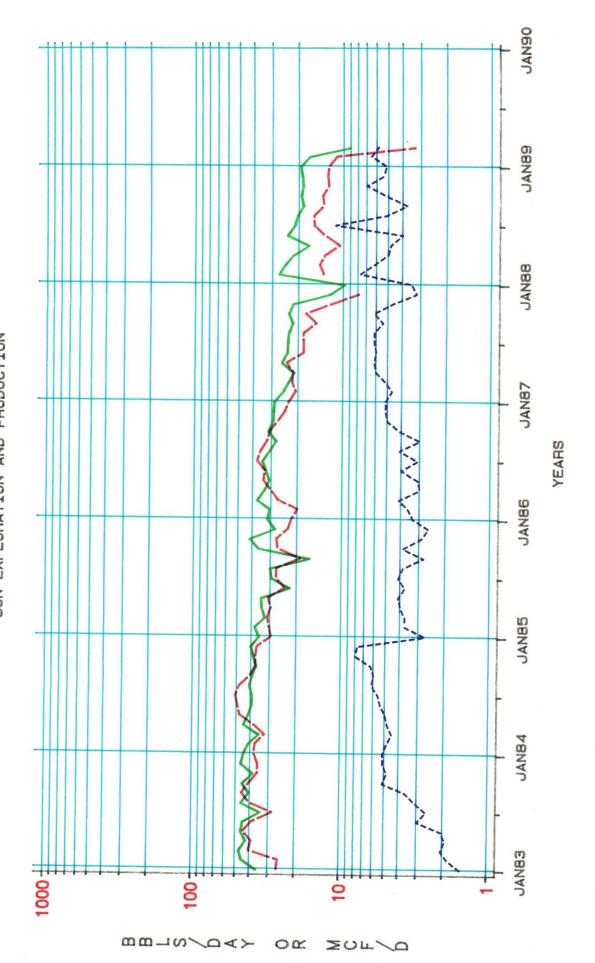
> PUMPING. NO CHANGE IN PRODUCTION BASED ON PRODUCTION CURVE.

11-88 LAST TEST: 18.8 BO, 7 BW, 12.7 MCF

CUMULATIVE PRODUCTION (THRU 11/88): 256.6 MBO, 203.9 BSCF



# NEW MEXICO R STATE NO.2 SUN EXPLORATION AND PRODUCTION



GAS

OIL

Submit 3 Copies to Appropriate District Office

## State of New Mexico Energy, Minerals and Natural Resources Department

Form C-103

CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION DIVISION

Revised 1-1-89

P.O. Box 2088  P.O. Box 2088  P.O. Box 2088  30-025-23266			
P.O. Drawer DD, Artesia, NM 88210  Santa Fe, New Mexico 8/304-2088  5. Indicate Type of Lease  STATE FEE			
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410	6. State Oil & Gas Lease No. 0G5217		
SUNDRY NOTICES AND REPORTS ON WELLS  ( DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"  (FORM C-101) FOR SUCH PROPOSALS.)  7. Lease Name or Unit Agreement Name			
1. Type of Well: OIL X WELL OTHER New Mexico "R" State			
2. Name of Operator 8. Well No.			
Sun Exploration & Production Co. 2  3. Address of Operator 9. Pool name or Wildcat			
P.O. Box 1861, Midland, Texas 79702 CERCA Cera (upper Penn)			
4. Well Location  Unit Letter H: 660 Feet From The East Line and 2129 Feet From The North Line  Section 33 Township 13-S Range 34-E NMPM Lea County			
4140' GR			
11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data  NOTICE OF INTENTION TO:  SUBSEQUENT REPORT OF:			
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:		
PERFORM REMEDIAL WORK  PLUG AND ABANDON	REMEDIAL WORK ALTERING CASING		
TEMPORARILY ABANDON CHANGE PLANS	COMMENCE DRILLING OPNS. DRUG AND ABANDONMENT		
PULL OR ALTER CASING CASING TEST AND CEMENT JOB			
OTHER: Add Perfs XX			
12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.			
3/14/89 Perf Wolfcamp Set I & II from 10341-5 Howco spot & Displaced 1500 gal's 15% NEFCHCL Raised and reset RBP @10,375' tested to 1500°. Acid from 10360-274', faised and set pkr @ 102 attempt to acdz wolfcamp set I & II perfs from pumped into the perfs @ 1/2 BPM 4200#, opened tbg communicated w/ annulus, open by pass rev 3/15/89 Set pkr at 10170' press annulus to 1010314-58 w/2% KCL wtr 1 BPM at 4800# before sw annulus.  3/16/89 RIH w/ 2 3/8" & 2 7/8" tbg. TS 10434'	acid into Penn perfs 10398-407.  O.K. Howco spot 2 BBL's 15% NEFCHCL  O5'. pressured annulus to 1000# Howco  10314-58 w/3500 gal 15% NEFCHCL acid,  by-pass*, continued pumping @ 1/2 BPM 4200#  acid to Pit.  O0#, Howco EIR into Wolfcamp perfs Set I & II  itching to acid press communicated to		
3/31/89 24P 11 Bo 20 BLW 8 MCF			
* Spotted Acid to pkr, closed by pass.			
I hereby certify that the information above is true and complete to the best of my knowledge and be			
SIONATURE TITLE	Accountant 4-10-89		
TYPE OR PRINT NAME Maria L. Perez	TELEPHONE NO. 915 688-037		
(This space for State Use)			
APPROVED BY TITLE	DATE		

Revised 1/1/89 Form C-116

Energy, Minerals and Natural Resources Department State of New Mexico

## **OIL CONSERVATION DIVISION**

P.O. Drawer DD, Artesia, NM 88210 DISTRICT III

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

Submit 2 copies to Appropriate

District Office.

DISTRICT

1000 Rio Brazos Rd., Aztec, NM 87410

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

## GAS - OIL RATIO TEST

					,		-		1							
Operator						Pool						8	County			
Sun Exploration & Production Co.	tion C	,oʻ			చ	Cera (Upper Penn)	Pe	nn)					Lea			
Address P.O. Box 1861 Midland, Texas	Texas	79702	8				TYPE OF TEST - (X)	₽ 	Scheduled		8	Completion		ઝ	Special XX	Z
,	WELL	1	LOCATION	NOL		A TEAC	sn	170.0	É	DAILY	LENGTH	Æ	PROD. DURING TEST	VG TEST		GAS-OIL
LEASE NAME	9	2	S	F	æ	TEST	TATS	SIZE	PRESS.	ALLOW- ABLE	TEST HOURS	WATER BBLS.	GRAV.	Off. BBLS.	GAS M.C.F.	CU.FT/BBL.
New Mexico "R" State	2	工	33	13	34	3-31-89	۵				24	20		7	80	727/1
											Tehy Cer	Hifv that	the aby	I hereby certify that the above information is	mation	is true an
Instructions:										ii com	plete to the	ne best of	f my tano	complete to the best of my triowledge and belief.	nd belief	

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

relephone No.

915 688-0375

Maria L. Perez Accountant

Signature

Printed name and title

4-10-89

(See Rule 301, Rule 1116 & appropriate pool rules.)

### STATE OF NEW MEXICO



## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

May 15, 1989

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

Sun Exploration & Production Company P.O. Box 1861 Midland, Texas 79702 9970

Attention: Bruce Goodwin

## Dear Bruce:

I have received your application dated April 13, 1989 for authorization to downhole commingling the Penn and Wolfcamp intervals in the New Mexico "R" State Well No. 2 located 2129 feet from the North line and 660 feet from the East line (Unit H) of Section 33, Township 13 South, Range 34 East, NMPM, Lea County, New Mexico. I have examined the application and find everything in order except that it is deficient in notice to offset operators as stipulated in Division Rule 303. Regardless of the producing capabilities of the Wolfcamp interval, proper offset operator notification is necessary to approve the application. Please send notification of the proposed commingling to all offset operators and please furnish a copy of said notification to me.

If you have any questions, please contact me at (505)827-5800.

Sincerely

David Catanach

Engineer



## STATE OF NEW MEXICO

## ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

4-17-89

GARREY CARRUTHERS
GOVERNOR

/ed

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501	RECEIVED	
RE: Proposed:	APR 2 0 1989	
MC DHC X NSL NSP SWD WFX PMX	OIL CONSERVATION DIV. SANTA FE	
Gentlemen:		
I have examined the application for the:  Sun Expl + Prod Co. New Mexico R State # 2 H 33-13-3 y  Operator Lease & Well No. Unit S-T-R  and my recommendations are as follows:  A first first for the second		
Youns very truly,  Jerry Sexton Supervisor, District 1		